

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT INITIATION

Date: October 18, 1977

Project Title: Operation of the INTELSAT 20/30 GHz Radiometric Receiving Terminal

Project No: A-2052

Project Director: Mr. J. J. Gallagher

Sponsor: The INTELSAT Organization; c/o COMSAT Corp. Headquarters; Washington, DC 20024

Agreement Period: From 9/2/77 Until 9/1/78 (Contract Exp.)

Type Agreement: Contract No. IS-841 (Fixed-Price)

Amount: \$10,609

Reports Required: Biweekly Data Submissions; Monthly Progress Letters.

Sponsor Contact Person (s):

Technical Matters

Dr. David Rogers
COMSAT Laboratories
Propagation Studies Dept.
22300 COMSAT Drive
Clarksburg, MD 20734
Phone: (301) 428-4390

Contractual Matters

(thru OCA)

Mr. Charles E. Kelly
Communications Satellite Corp.
Room 5122
950 L'Enfant Plaza, SW
Washington, DC 20024
Phone: (202) 554-6731

NOTE: Companion project is A-2051.

Defense Priority Rating: None.

Assigned to: Electromagnetics Laboratory (School/Laboratory)

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director-EES
Accounting Office
Procurement Office
Security Coordinator (OCA) ✓
Reports Coordinator (OCA)

Library, Technical Reports Section
EES Information Office
EES Reports & Procedures
Project File (OCA)
Project Code (GTRI)
Other _____

GEORGIA INSTITUTE OF TECHNOLOGY
OFFICE OF CONTRACT ADMINISTRATION
SPONSORED PROJECT TERMINATION

Date: 12/8/80

Project Title: Operation of the INTELSAT 20/30 GHz Radiometric Receiving Terminal

Project No: A-2052

Project Director: Mr. J. J. Gallagher

Sponsor: The INTELSAT Organization; Washington, D. C. 20024

Effective Termination Date: 4/14/80

Clearance of Accounting Charges: N/A; Fixed Price

Grant/Contract Closeout Actions Remaining:

☒ Final Invoice and Closing Document

☐ Final Fiscal Report

☒ Final Report of Inventions

☐ Govt. Property Inventory & Related Certificate

☐ Classified Material Certificate

☐ Other _____

Assigned to: EML/EOD (School/Laboratory)

COPIES TO:

Project Director
Division Chief (EES)
School/Laboratory Director
Dean/Director—EES
Accounting Office
Procurement Office
Security Coordinator (OCA)
Reports Coordinator (OCA)

Library, Technical Reports Section
EES Information Office
Project File (OCA)
Project Code (GTRI)
Other _____

MONTHLY LETTER NO. 1

OPERATION OF THE INTELSAT 20/30 GHz
RADIOMETRIC RECEIVING TERMINAL

Contract No. IS-841
(A-2052)

The INTELSAT Organization
c/o COMSAT Corporation Headquarters
Washington, D. C. 20024

By

Engineering Experiment Station
Georgia Institute of Technology
Atlanta, Georgia 30332

Project Director: James J. Gallagher

8 December, 1977

The INTELSAT 20/30 GHz Radiometric Receiving Terminal will be operated on the roof of the Engineering Experiment Station's Baker Building. It will be fixed to a platform which is part of the EES Propagation Range. Drawings of the radiometer terminal are required to prepare fixtures for mounting of the apparatus. All facilities are available for operation of the terminal. These measurements can begin as soon as the terminal is made available.

MONTHLY LETTER NO. 2

OPERATION OF THE INTELSAT 20/30 GHz
RADIOMETRIC RECEIVING TERMINAL

Contract No. IS-841
(A-2052)

The INTELSAT Organization
c/o COMSAT Corporation Headquarters
Washington, D. C. 20024

By

Engineering Experiment Station
Georgia Institute of Technology
Atlanta, Georgia 30332

Project Director: James J. Gallagher

23 January, 1978

During the past month, no work has been performed on the contract since the INTELSAT 20/30 GHz Radiometric Receiving Terminal has not been delivered. The Engineering Experiment Station is prepared to begin operation and maintenance of the terminal as soon as the apparatus is made available.

A-2052

MONTHLY LETTER NO. 3

OPERATION OF THE INTELSAT 20/30 GHz
RADIOMETRIC RECEIVING TERMINAL

Contract No. IS-841
(A-2052)

The INTELSAT Organization
c/o COMSAT Corporation Headquarters
Washington, D. C. 20024

By
Georgia Institute of Technology
Engineering Experiment Station
Atlanta, Georgia 30332

Project Director: James J. Gallagher

6 February, 1978

During the past month, no work has been performed on the contract since the INTELSAT 20/30 GHz Radiometric Receiving Terminal has not been delivered. The Engineering Experiment Station is prepared to begin operation and maintenance of the terminal as soon as the apparatus is made available.

Conversation with Dave Rogers, contract monitor for COMSAT indicated that the radiometers will be available when some of the units are returned from current terminating contracts. It is expected that these units will be available within approximately one month.

No further monthly letters will be issued until work begins on the radiometers. Twelve letters beyond those issued thus far will have to be written.

MONTHLY LETTER NO. 4-11

OPERATION OF THE INTELSAT 20/30 GHz
RADIOMETRIC RECEIVING TERMINAL

Contract No. IS-841
(A-2052)

The INTELSAT Organization
c/o COMSAT Corporation Headquarters
Washington, D. C. 20024

BY

Engineering Experiment Station
Georgia Institute of Technology
Atlanta, Georgia 30332

Project Director: James J. Gallagher

5 July, 1979

Discussion:

The 20/30 GHz system has been installed and operated at the Cobb County site. Initially the system functioned very well. However, the sample and hold on 18 GHz has gone out and was later replaced by Pete Ackerman. The 28 GHz system operated alone during this period. More recently, the 20/30 GHz system down-converter failed and was returned to COMSAT where it is currently being repaired. It will be returned with Dr. G. Hyde on his visit of July 13, 1979.

Data have been taken during this reporting period, some of which has been forwarded to COMSAT. In some cases, only one channel produced data due to the malfunction of the second channel.

The hygrothermograph has been received and installed at Cobb County. Checks of the unit against other gauges indicate that it reads temperature correctly but is low by 13-19% in humidity. It has been checked against two available units which agree within 1%.